

- **Scenario 2** – On-highway vehicle NO_x and volatile organic compound (VOC) reductions. The specific control programs would include: (a) Tier 2 tailpipe standards applied nationwide,¹ (b) expansion of Federal reformulated gasoline to the entire Ozone Transport Assessment Group (OTAG) region, and (c) application of high enhanced inspection and maintenance (I/M) in metropolitan statistical areas and consolidated metropolitan statistical areas with 1990 population greater than 500,000.
- **Scenario 3** – This would include a combination of SO₂, NO_x, and VOC emission reductions from Scenarios 1 and 2.

In addition, EPA had previously planned to include alternative energyscenarios in its analysis of supplemental scenarios. In order to perform all of the disaggregated analyses necessary to meet the core objectives of the Section 812 study, however, EPA will need to exclude the analysis of alternative energy scenarios from the second prospective. EPA hopes to address alternative energy scenarios in future efforts.

For the second prospective, EPA intends to analyze two types of supplemental scenarios: alternative pathway scenarios and increased control scenarios. For the alternative pathway analyses, EPA plans to assess the costs and benefits of different programatic pathways to core CAAA compliance. *These pathways represent a redistribution of emissions reductions across source categories.* As Exhibit 2-7 illustrates, alternative pathway emission reductions are intended to be comparable to post-CAAA emissions. [note: we probably can't make them exactly "equal" because of non-continuousness in the emissions control opportunity set.. This is discussed in more detail in another markup below...] Such an analysis will allow EPA to evaluate the relative efficiency of different strategies for complying with the CAAA. EPA also proposes to examine the costs and benefits of standards more stringent than those required by the CAAA. Area D in Exhibit 2-7 illustrates how an increased control scenario builds incrementally on the post-CAAA scenario. This analysis will provide insight into the potential implications of tightening CAAA requirements across source categories and pollutants.

EPA proposes the analysis of **three** alternative pathways. The **first pathway emphasizes** emissions reductions at utilities, with compensatory easing of reduction requirements from selected non-utility sources, resulting in overall progress toward NAAQS attainment comparable to that achieved by the core control scenario. The **second** scenario reflects a shift in NAAQS compliance strategies toward highway vehicles, and the **last pathway** combines elements of the first **two**. The pathways are as follows:

- **Pathway 1:** This pathway would reflect the electric generating unit cap and trade proposals included in the Clear Skies Initiative. These proposals include emissions caps of 3 million

¹ The Tier 2 tailpipe standards applied nationwide will now be applied in the post-CAAA baseline scenario, and will affect 2010 and 2020 emissions.